

Remarks

Claims 1 has been amended. Claims 6-8, 12, 21 and 22 have been canceled without prejudice. No new matter has been added by way of these amendments.

Drawing Objections

Applicant has cancelled without prejudice claim 21 that was directed at different fluid media, which overcomes examiners drawing objections.

Claim 1 is directed at 'a fluid medium', rather than different fluid media and is supported by the drawings as filed. Specifically, the feature that provides context in the claim with regard to the fluid medium is that "the hydraulic braking device is immersed in a fluid medium" and this is clearly supported by the diagrams, in which Figure 3 shows arrows indicating the path of the fluid medium (or drilling fluid 101).

Claim Objections

Claim 6-8, 12, 21 and 22 have been canceled without prejudice, thereby overcoming the examiners latest claim objections.

Claim Rejections 35 USC 112

Examiner rejects independent claims 1 and 23 as being indefinite for failing to distinctly claim the subject matter.

Applicant respectfully disagrees that the feature "a resisting torque that is a function of the rotation speed of the turbine shaft with respect to the fluid medium" is indefinite or indistinct. The explicit text to support this feature can be found in the text at page 2 lines 16-17 and also at page 4 lines 19 and 20. Thus, the subject matter being claimed and the support for it in the text as filed, is quite clear. Examiner's points to one described embodiment, which describes taking the difference between rotation speeds, but this does not affect the general relationship described clearly on page 4 lines 19-20.

Applicant has however amended the language in the preamble of claim 1 in line with the examiner's second suggestion.

Claim Rejections 35 USC 102

Claims 1 and 23 both contain the distinguishing feature of “*generating a resisting torque that is a function of the square of the rotation speed of the turbine shaft with respect to the fluid medium.*”

Neither Ioanesian (US 3,728,040) or Braun (US 3,547,231) teach this feature.

Applicant wholly disagrees with the examiner’s reasoning that it is for the applicant to provide evidence that prior art references do teach something. If the examiner believes such a feature to be inherent in a prior art reference; MPEP 2112 (iv) makes it clear that it is for the examiner to provide rationale or evidence tending to show inherency:

“The fact that a certain result or characteristic may occur or be present in the prior art reference is not sufficient to establish the inherency of that result or characteristic”, and “Inherency ... may not be established by probabilities or possibilities”.

Instead examiner has incorrectly shifted the evidence burden onto the applicant. Applicant has already shown that the present application acknowledges on page 1 the serious drawback of prior art having a linear torque-speed characteristic. Thus, the claimed squared non-linear characteristic is certainly not inherently obvious from any prior art reference unless such a squared relationship is taught, which is not the case.

Furthermore, it is not only the squared braking characteristic which is not disclosed, but also it is the particular advantageous effects of such a characteristic in a drilling environment which is not disclosed, taught or suggested in any of the prior art.

Applicant is of the opinion that this reply is fully responsive to all outstanding issues. Accordingly, the application is now deemed to be in condition for allowance, and notice to that effect is solicited. This paper is submitted in response to the Office Action mailed December 17, 2008 for which the three-month date for response was March 17, 2009. Pursuant to 37 C.F.R. § 1.136(a), Applicants petition for an extension of time of one month in which to respond to the Office Action. This one month extension will bring the deadline for response to April 17, 2009, which is within the six-month statutory period.

Please apply any charges not covered, or any credits, to Deposit Account 50-2183 (Reference Number 21.1106).

Dated: _____

Respectfully submitted,

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